EXPECTANCIES AS MEDIATORS BETWEEN RECIPIENT CHARACTERISTICS AND SOCIAL SUPPORT INTENTIONS

Ralf Schwarzer, Christine Dunkel-Schetter, Bernard Weiner, and Grace Woo

It is assumed that the motivation to extend social support is governed by specific emotions and cognitions, among them outcome expectancies and self-efficacy expectancies. Two experiments were conducted to explore this assumption. Study I dealing with outcome expectancy and Study II dealing with self-efficacy expectancy. In Study I, outcome expectancies toward eight disease-related stigmas and the intention to extend social support were examined with two experimental conditions. The onset of the stigmas was varied as being either controllable or uncontrollable. In addition, the target person was described either as actively coping with the stigma or as not actively coping. Examined were the effects of onset controllability and coping on pity, outcome expectancy, and willingness to support the target person. In a within-groups design, 84 subjects were confronted with all eight stigmas under four different conditions. Both experimental factors influenced the reported reactions. The coping variable appeared to be stronger than the controllability variable and, in addition, outcome expectancy was a somewhat more important mediator of helping than pity. However, the pattern of data was context-specific, i.e., different sets of predictors emerged for different stigmas. Study II was a similar experiment pursuing the notion that the motivation to help is affected by the belief that one can be effective as a helper (self-efficacy expectancy). It examined whether self-efficacy expectancy for helping a rape victim served as a mediator of the relationship between recipient characteristics and support intentions. The recipient characteristics assessed were victim coping and controllability of the assault. Both pity and self-efficacy expectancy emerged as good predictors of support, whereas controllability and coping were of lesser influence.

According to Bandura’s cognitive-social theory, human behaviors are partly governed by expectancies, in particular by outcome expectancies and self-efficacy expectancies (Bandura, 1977, 1986, 1991). Many studies, some of them
presented in this volume, have applied this assumption to specific behaviors in various domains of human functioning such as achievement, organizational management, or health. There seems to be, however, no application to studies on social support. The willingness to help others depends partly on one’s emotions at the time, but helping also depends on judgments about the specific situation, characteristics of the recipient, and one’s self. Among such cognitions are expectancies about the likelihood that the situation can be changed and regarding one’s ability to provide the necessary social support. Expecting a condition to improve under certain circumstances represents an outcome expectancy. Belief in oneself as an effective support provider in a particular situation represents a self-efficacy expectancy. These cognitions are hypothesized to serve as causal mediators of the relationships between antecedent recipient characteristics and consequent intentions to extend social support. In addition, a number of other factors outlined below are considered important in the study of social support.

The present chapter reports two studies. The first one deals with the mediating role of outcome expectancy, the second one with the mediating role of self-efficacy expectancy. In the following sections, we describe in more detail the constructs involved in this research, in particular perceived controlability, perceived coping, expectancies, and social support.

Perceived Controllability

Attribution theory has recently been extended to the study of social stigmas and reactions to the stigmatized (Weiner, Perry, & Magnusson, 1988). By social stigma we mean a discrediting condition or mark that defines a person as “deviant, flawed, limited, spoiled, or generally undesirable” (Jones et al., 1984, p. 6). Among others, physical deformities, behaviorial problems such as excessive eating and drinking, and diseases can be regarded as stigmas. Attribution theory is relevant to the study of stigmas because individuals typically search for the cause(s) of a negative state or condition existing in others. That is, observers confronted with a “markable” target initiate an attributional search to determine the origin of the stigma.

Researchers have identified controllability as one of the basic dimensions of perceived causality (Weiner, 1985, 1986). Controllable causes are those which an actor can volitionally change, whereas uncontrollable causes are not subject to personal mastery or management. The onset of a drug problem, for example, is seen as controllable if a person has been experimenting with drugs out of curiosity, whereas it is perceived as comparatively uncontrollable if a person has had medical treatment with drugs and thereby developed a dependency (Weiner et al., 1988). In a similar manner, the onset of a heart disease is construed as controllable if the person has led an unhealthy life-style, including smoking and a poor diet, whereas it is considered relatively uncontrollable if hereditary factors have played a major role in the illness.

Affective and Behavioral Reactions

It has been documented that the perceived controllability of a social stigma determines disparate affective reactions toward the target person and different behavioral responses as well (e.g., DeJong, 1980; Weiner et al., 1988). More specifically, uncontrollable origins of stigmas tend to elicit pity and offers of help, whereas controllable origins tend to elicit anger and no help (see Reisenzein, 1986; Schmidt & Weiner, 1988; Weiner et al., 1988). Hence, it has been shown that experimentation with drugs and an unhealthy lifestyle as causes of stigmas yield much anger, little pity, and relative neglect, whereas drug problems due to medical treatment, and heart disease derived from genetic factors, give rise to little anger, much pity, and prosocial responses.

Perhaps more than in any other area within the field of social motivation, investigators of helping behavior have assumed that emotions play an important motivational role (see review in Carlson & Miller, 1987). These emotions have included discomfort (e.g., Cialdini, Darby, & Vincent, 1973), distress (e.g., Batson, O’Quinn, Fultz, Vanderplas, & Isen, 1983), empathy (e.g., Batson, 1990; Hoffman, 1975), gratitude (e.g., Goranson & Berkowitz, 1966), guilt (e.g., Hoffman, 1982), as well as pity and anger (Schwarzer & Weiner, 1990, 1991). While there is strong support for an attribution—emotion—helping link, there are also studies that have failed to demonstrate this effect. Capitalizing on a real-life event, Amato, Ho, and Partidge (1984) sent survey questionnaires to residents living near the setting of a major bushfire which killed 46 people and destroyed over 2,000 homes. The questionnaire addressed perceptions of causality and responsibility, affective reactions, and helping behavior. Most people reported donating to the victims regardless of the amount of responsibility attributed to them. The obvious high degree of need in this context seemed to have overwhelmed the attribution of control effects.

Jung (1988) presented subjects with vignettes depicting a close friend experiencing a variety of common problems, with manipulations of the responsibility for the problem. For each vignette, subjects rated the target person’s deservedness of fate, perception of how helpful social support would be for the problem, and their likelihood of providing social support. Perceived deservedness of fate was greater for those viewed as having high responsibility. Perceived benefits of social support were also higher in this case. However, neither factor affected the likelihood of social support provision.

Skokan (1990) examined the affective responses and support behaviors extended towards a roommate who is dealing with either cancer or the death of her father. Subjects were presented with scenarios which depicted the roommate as either responsible or as not responsible for the onset of the critical event. In her initial within-subjects analysis, controllability was associated with more anger, less sympathy and less social support; however, when reanalyzed as a between-subjects design because of order effects, the impact of controllability on sympathy and support disappeared.
Perceived Coping

It remains unclear whether stigma onset, which is a distant event, is the sole or main determinant of affective and behavioral reactions toward the stigmatized or whether subsequent events, controllable or uncontrollable, alter the causal sequence. Drug experimentation and poor life-style, for example, might be weak predictors of the emotions and behaviors of observers when compared with the present efforts of the target person to cope with the consequences of the stigma. In the achievement domain, it is obvious that even after failure due to lack of effort, present expenditure of effort to compensate or recover generates positive affect and rewards for the failed student (Karasawa, 1991; Weiner, 1985). When generalized to the health domain, this finding suggests that positive coping attempts with a serious health condition could play an important role in determining the affective and behavioral reactions of others.

Skokan (1990) distinguished in her scenario experiment between adaptive coping and maladaptive coping. In the adaptive condition, the target person who either had cancer or was bereaved, tried to stay optimistic and to look for ways to go on with her life and to grow from the experience. In the maladaptive condition, she dwelled on the negative aspects of the situation and did not try to overcome the crisis instrumentally. Adaptive coping of the target was related to less anger in subjects but had mixed effects on their willingness to offer social support. In the bereavement condition, poor coping elicited less support, but in the cancer condition, unexpectedly, poor coping elicited even more support.

Silver, Wortman, and Crofton (1990) studied subject reactions to a cancer patient who was portrayed either as a “good copier,” a “bad copier” or a “balanced copier.” In the good coping condition, the target person expressed an optimistic view of her illness and appeared to be coping well. In the balanced coping condition, she conveyed distress about what was happening, but also indicated that she was trying her best. In the poor coping condition, she displayed distress about what was happening and appeared to have difficulty coping. In nine out of ten comparisons, the responses to confederates who were portrayed as having positive or balanced coping styles were significantly more favorable than were responses to poor copers.

In sum, both the origin of a problem and its solution are hypothesized to be important when examining reactions of others toward the stigmatized person (Brickman et al., 1982). That is, the responsibility for causing a problem should be separated from the responsibility for maintaining or not alleviating it. This important distinction has been ignored in prior research on attributions (see also Karasawa, 1991; Schwarzer & Weiner, 1991). The present studies compare the effects of perceived onset controllability with those of perceived coping efforts on pity, outcome expectancy, and social support towards the stigmatized and examines the mediating role of pity and expectancy.

Expectancies and Help Intentions

Expectancies

The focus of the present paper is on the role of mediating factors that link attributions and affect regarding a social stigma to behavioral intentions or to actual support behavior. Bandura (1977, 1986, 1991) has convincingly demonstrated that expectancies are very important social-cognitive mediators of action. There are two major cognitions of this kind, outcome expectancies and self-efficacy expectancies. In the first experiment, we deal with outcome expectancies that refer to the possibility of improvement of a condition. The subjects were asked how likely it is that a target person’s condition would improve under particular circumstances. It is hypothesized that an individual’s active coping with an ailment will trigger positive outcome expectancies in the observer. Coping behavior implicitly refers to the stability of a stigma. If the victim is not actively involved in alleviating the distress, maintaining functioning and moving on with daily life, one would have little reason to expect an improvement; support may be seen as wasted labor. If, however, a great deal of effort is expended by the victim in solving the problem, one can expect that changes are more likely and that supplementary contributions would be a worthwhile investment. This reasoning does not apply to situations that require acceptance; that is, we are likely to help people who behave passively when passivity is required in the situation.

In the second experiment, the focus is on self-efficacy expectancy in terms of one’s helping capabilities. Empathy, perspective taking, comforting skills and so on, not only facilitate social support in an objective sense (Batson, 1990; Clary & Orenstein, 1991); these abilities also have to be perceived by the help provider in order to establish a motivation to help. Help-specific self-efficacy deals with cognitions about one’s capability to support others and to make a difference with this support; it refers to one’s perceived personal resources to provide competent assistance and to achieve relief for a sufferer.

Social Support

Social support has been defined as an exchange of resources “perceived by the provider or the recipient to be intended to enhance the well-being of the recipient” (Shumaker & Brownell, 1984, p. 13). This definition requires that either the provider or the recipient must perceive that the provider has a positive intent. Intentions have also been claimed as being the best predictors of a variety of behaviors; this is well-documented in research based upon the Theory of Reasoned Action (Fishbein & Ajzen, 1975) and the Theory of Planned Behavior (Ajzen, 1988). Evidence of the influence of help intentions on actual helping behavior has been found by Borgida, Simmons, Conner, and Lombard (1990) and Dalbert, Montada, and Schmitt (1988). Whether intentions to help are accurately perceived by the provider or by the recipient is a related but different question (Dunkel-Schetter & Bennett, 1990; Dunkel-Schetter, Blasband, Feinstein, & Bennett, 1991).
Several factors determine the likelihood that a supportive exchange actually takes place. Stress factors, relationship factors, recipient factors, and provider factors have been discussed and somewhat studied (Dunkel-Schetter & Skokan, 1990). We will deal here with the latter two exclusively. *Recipient factors* are critical determinants of support. Victims who are not only distressed, but are also not responsible for the event, and who invest a great deal of effort to manage their condition, are apt to elicit more help than those who are responsible themselves for their misfortune and who do not take action to solve their issue (Bennett-Herbert & Dunkel-Schetter, in press; Brickman et al., 1982). Creating frustration and helplessness in the potential provider leads to a lesser likelihood of support (Dunkel-Schetter & Wortman, 1981, 1982). The expression of too much distress strains the social network, evokes negative reactions, and turns those away who would have been supportive if the distress level had only been moderate. Another reason why the network may not be mobilized is if a victim is not coping adaptively. Passive, depressive and ungrateful victims or patients are seen as socially unattractive and, therefore, receive less support in the long run (Barbee, 1990; Gurtman, 1986; Notarius & Herrick, 1988). Paradoxically, those subjects who have valuable personal resources such as competence, high self-esteem, locus of control, and optimism and who make use of their resources seem to elicit a stronger tendency in others to extend support.

*Provider factors* have been intensively studied in social psychology research on helping (Batson, 1990; Berkowit, 1987; Dovidio, 1984; Eisenberg & Miller, 1987; Jung, 1988). It makes a difference how the cause of the problem is attributed. If it is seen as controllable then the victim is blamed and negative emotional reactions are aroused such as anger, leading to neglect of the sufferer. If, on the other hand, the cause is seen as uncontrollable and the person does not seem to be responsible for the problem, then positive emotions such as pity emerge, which make help more likely (Weiner, 1985). Thus, emotions are mediators of attributions and behavioral intentions. According to Batson (1990), empathy predicts altruistic motivation to help, whereas a provider’s distress tends to elicit egoistic motivation, which does not induce help. These two theories by Weiner and Batson are closely related in terms of emotional mediators of motivation. Pity can be matched to empathy as a predictor of help, and anger parallels distress in predicting neglect. Betancourt (1990) has attempted to integrate both views by manipulating experimentally the controllability of onset of a problem as well as inducing different perspectives in the potential support provider. He found that both experimental factors influenced perceived controllability and empathic emotions that, in turn, influenced helping.

In the present chapter, the focus is on experimentally manipulated recipient factors, but it is kept in mind that these do not operate in an isolated manner. Rather, they interact with on-going responses by the provider during a specific social encounter. It is only of secondary importance whether the victim is actually responsible for the problem and whether active coping is executed. Moreover, the degree to which the provider makes these attributions, is considered to be critical. The perception in the beholder may be more relevant than the actual cause of the onset of the stigma or the actual coping behavior.

The present experiments were designed to examine the effects of perceived controllability and perceived coping on pity as an affective reaction and on expectancies that, in turn, were hypothesized to exert an influence on support intent. The studies differ in terms of the scenarios used and in terms of the expectancy variables. While Study I deals with outcome expectancy, Study II deals with self-efficacy expectancy.

**STUDY I**

**Method**

*Sample.* The subjects were 84 male and female students at the University of California, Los Angeles, who received credit in an introductory psychology course for their participation. They were randomly assigned to one of four groups (see below) and given questionnaires in small group sessions with anonymity assured.¹

*Design.* Eight health-related stigmas were selected, each of which was manipulated with respect to onset controllability and coping effort. Each subject received four of the eight stigmas paired uniquely with one of the four controllability conditions (2 Levels of Onset Responsibility x 2 Levels of Coping). Subjects were divided into four groups that received different combinations of stigmas and conditions (see Table 1).

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Experimental Design</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Onset Responsible</td>
</tr>
<tr>
<td></td>
<td>No Coping</td>
</tr>
<tr>
<td>Group 1</td>
<td>Aids</td>
</tr>
<tr>
<td>Group 2</td>
<td>Cancer</td>
</tr>
<tr>
<td>Group 3</td>
<td>Drug abuse</td>
</tr>
<tr>
<td>Group 4</td>
<td>Heart disease</td>
</tr>
<tr>
<td></td>
<td>Anorexia</td>
</tr>
<tr>
<td>Group 1</td>
<td>Anorexia</td>
</tr>
<tr>
<td>Group 2</td>
<td>Child abuse</td>
</tr>
<tr>
<td>Group 3</td>
<td>Depression</td>
</tr>
</tbody>
</table>

¹ Study I was conducted by Ralf Schwarzer and Bernard Weiner.
As shown in Table 1, one part of the design included four stigmas (AIDS, cancer, drug abuse, and heart disease) paired with the four conditions, while a second part replicated the first but used another four stigmas (anorexia, depression, obesity, and child abuse). Thus, there were two within-group factors (onset controllability and coping) and one between-group factor (stigma set). This design allowed for an overall analysis as well as for stigma-specific subanalyses.

Four vignettes were created for each stigma consisting of: (a) onset responsibility and low coping; (b) onset responsibility and high coping; (c) no onset responsibility and low coping; and (d) no onset responsibility and high coping. As an example, the obesity vignettes are given:

1. **Maladaptive coping, controllable.** Your roommate has become excessively overweight, and is experiencing severe problems in social- and work-related activities. Excessive eating and lack of exercise have been the primary contributors to the obesity. This roommate does not take any steps to lose weight, either by dieting, exercising or by following a medical regimen.

2. **Adaptive coping, controllable.** Your roommate has become excessively overweight, and is experiencing severe problems in social- and work-related activities. Excessive eating and lack of exercise have been the primary contributors to the obesity. Recently this roommate has commenced a new diet prescribed by a physician, and is regularly exercising.

3. **Maladaptive coping, uncontrollable.** Your roommate has become excessively overweight, and is experiencing severe problems in social- and work-related activities. Glandular dysfunction has been identified as the reason for the obesity. This roommate does not take any steps to lose weight, either by dieting, exercising or by following a medical regimen.

4. **Adaptive coping, uncontrollable.** Your roommate has become excessively overweight, and is experiencing severe problems in social- and work-related activities. Glandular dysfunction has been identified as the reason for the obesity. Recently this roommate has commenced a new diet prescribed by a physician, and is regularly exercising.

**Measures.** The dependent variables were the following 9-point rating scales, anchored with extremes such as *not at all* and *very much so*. Pity was assessed by the single item “How much pity would you feel?”

Typically, outcome expectancies are worded in an “if-then manner.” In the present experiment, however, the if-component was given by the four experimental conditions such as: “If the stigma is uncontrollable and if the victim is actively coping with it, then...” Because of these implicit assumptions, the measurement of the outcome expectancy was restricted to the then-component and simply worded: “How likely is it that the condition will improve?”

**Social support intention** was measured by seven items representing different kinds of social support. However, this was a homogeneous scale (Cronbach’s alpha for the seven social support items was .91), and therefore, the aggregated score was used as an indicator of support intentions. The items were:

1. How much would you like to extend support to your roommate?
2. How much time would you be willing to spend talking and listening?
3. How much money would you be willing to donate in order to provide the best possible treatment?
4. How much would you like to go on a holiday trip with your roommate?
5. How much would you be willing to give advice and information?
6. How much would you be willing to console and reassure your roommate when being upset?
7. How willing would you be to assist with a small problem?

Other dependent variables were analyzed previously within the framework of analysis of variance, and some of the results are published elsewhere. However, we have only reported about the stigmas of heart disease (Schwarzer & Weiner, 1990), AIDS and cancer (Schwarzer & Weiner, 1991).

**Results**

To examine the role of pity and outcome expectancy as mediators of the relationship between victim characteristics and provider support intentions, a structural equation model was specified with controllability and coping as endogenous variables and pity, expectancy, and support as endogenous variables. This is a straightforward single indicator model with manifest variables. The two orthogonal experimental factors were believed to influence emotions and cognitions, whereas emotions and cognitions were specified to influence the behavioral intention directly. Controllability and coping, therefore, could exert indirect effects on support intent through pity and expectancy but were constrained not to exert direct effects, because this would not be in line with theory or past research. The two alternative mediating factors were pity and expectancy, and for both of them the size of their mediating effect was computed in addition to their direct impact on support intent (see Figures 2 to 9). This procedure was repeated eight times, for each stigma individually. Eight path analyses were carried out with the LISREL VII program (Jöreskog & Sörbom, 1988).

First, the degree to which the experimental data fitted the structural equation model was examined. Several indices of fit have been suggested in the literature (cf. Bentler, 1980). We have used five of them in this study, (a) the chi-square test which, if significant, indicates that the data deviate from the model, (b) the chi-square /df ratio which takes the degrees of freedom into account (df = 3) and which should be as low as possible; ratios above 3.0 are usually seen as unsatisfactory, (c) Jöreskog’s Goodness of Fit Index (GFI) which should be close to unity, (d) his Adjusted Goodness of Fit Index (AGFI) that makes an adjustment to the degrees of freedom and also should be as high as possible, and (e) the Root Mean Square Residual (RMSR) which is an index derived from the deviations of the original correlation matrix from the reproduced correlation matrix on the basis of the estimated parameters; this index should not exceed .05.
Table 2 summarizes the results of all eight path analyses. In six of eight cases, an excellent fit emerged, whereas the stigmas "Cancer" and "Child Abuse" turned out to be associated with a less appropriate fit. Overall, these satisfactory results indicate that the model specification is in line with the experimental data, but also that the specific stigma context makes a difference.

**Table 2**

**Goodness of Fit for the Eight Path Models**

<table>
<thead>
<tr>
<th>Stigma</th>
<th>chi²</th>
<th>p</th>
<th>chi²/df</th>
<th>GFI</th>
<th>AGFI</th>
<th>RMSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>4.36</td>
<td>.23</td>
<td>1.45</td>
<td>.98</td>
<td>.90</td>
<td>.05</td>
</tr>
<tr>
<td>Cancer</td>
<td>9.49</td>
<td>.02</td>
<td>3.16</td>
<td>.96</td>
<td>.79</td>
<td>.07</td>
</tr>
<tr>
<td>Drug abuse</td>
<td>1.46</td>
<td>.69</td>
<td>0.49</td>
<td>.99</td>
<td>.97</td>
<td>.03</td>
</tr>
<tr>
<td>Heart disease</td>
<td>2.44</td>
<td>.49</td>
<td>0.81</td>
<td>.99</td>
<td>.94</td>
<td>.04</td>
</tr>
<tr>
<td>Anorexia</td>
<td>0.92</td>
<td>.82</td>
<td>0.31</td>
<td>.99</td>
<td>.98</td>
<td>.02</td>
</tr>
<tr>
<td>Child abuse</td>
<td>15.18</td>
<td>.002</td>
<td>5.06</td>
<td>.94</td>
<td>.69</td>
<td>.08</td>
</tr>
<tr>
<td>Depression</td>
<td>1.50</td>
<td>.68</td>
<td>0.50</td>
<td>.99</td>
<td>.97</td>
<td>.03</td>
</tr>
<tr>
<td>Obesity</td>
<td>4.65</td>
<td>.20</td>
<td>1.55</td>
<td>.98</td>
<td>.90</td>
<td>.05</td>
</tr>
</tbody>
</table>

*Note.* GFI = goodness of fit, AGFI = adjusted GFI, RMSR = root mean square residual.

**Table 3**

**Percent of Explained Variance**

<table>
<thead>
<tr>
<th>Stigma</th>
<th>Pity</th>
<th>Expectancy</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>22</td>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>Cancer</td>
<td>6</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>Drug abuse</td>
<td>9</td>
<td>51</td>
<td>15</td>
</tr>
<tr>
<td>Heart disease</td>
<td>1</td>
<td>31</td>
<td>11</td>
</tr>
<tr>
<td>Anorexia</td>
<td>4</td>
<td>51</td>
<td>6</td>
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<tr>
<td>Child abuse</td>
<td>9</td>
<td>36</td>
<td>29</td>
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<tr>
<td>Depression</td>
<td>1</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Obesity</td>
<td>1</td>
<td>38</td>
<td>11</td>
</tr>
</tbody>
</table>

This is corroborated by the explained variance for the three endogenous variables pity, expectancy and support (Table 3). The model succeeded in explaining a great deal of the variance of expectancy and support but much less so of pity. This shows that the emotion of pity is not sufficiently predicted by controllability and coping. Other factors, not under scrutiny here, must be responsible for the variation in pity.

The stigma-specific path coefficients are displayed in Figures 1-8; Table 4 contains the decomposition of total effects into direct and indirect effects. Results for each stigma will be described briefly. Coefficients above .21 are significant.

**Table 4**

**Decomposition of Effects on Social Support Intention**

<table>
<thead>
<tr>
<th>Stigma</th>
<th>Predictor</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Control</td>
<td>0</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Coping</td>
<td>0</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Pity</td>
<td>55</td>
<td>0</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Expectancy</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Cancer</td>
<td>Control</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Coping</td>
<td>0</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Pity</td>
<td>43</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Expectancy</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Drug abuse</td>
<td>Control</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Coping</td>
<td>0</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Pity</td>
<td>14</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Expectancy</td>
<td>40</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Control</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Coping</td>
<td>0</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Pity</td>
<td>19</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Expectancy</td>
<td>26</td>
<td>0</td>
<td>26</td>
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<tr>
<td>Anorexia</td>
<td>Control</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Coping</td>
<td>0</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Pity</td>
<td>14</td>
<td>0</td>
<td>14</td>
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In the case of AIDS, a substantial causal path leads from controllability to pity \((p = .39)\) and another from pity to support \((p = .55)\). Coping has a somewhat lower impact on pity \((p = .25)\). Expectancy does not play a role: it is predicted neither by controllability nor by coping, and it does not predict support. Since AIDS is a terminal disease, it is not surprising not to find a large variation in outcome expectancy. Pity appears to be the appropriate emotional reaction which facilitates the likelihood to extend support (see Figure 1 and Table 4).

**Figure 1** Pity and expectancy as mediators between controllability and coping and social support in the AIDS scenario.

For cancer, pity was again the best predictor of support \((p = .43)\), whereas expectancy failed to contribute anything \((p = .07)\). But the antecedents were different; controllability had no significant impact on pity or expectancy, whereas coping had a strong path to expectancy \((p = .52)\) and a moderate one to pity \((p = .22)\). Although cancer can be a terminal disease in many cases, there are better survival chances for those who comply with treatment. This explains the association between coping and expectancy, but, surprisingly, there was little effect on support intentions that were based more on pity (see Figure 2 and Table 4).

**Figure 2** Pity and expectancy as mediators between controllability and coping and social support in the cancer scenario.

In case of drug abuse, variations in controllability elicited no effects reactions but coping did. A strong path from coping to expectancy emerged \((p = .70)\), accompanied by another strong path from expectancy to support \((p = .40)\) making this the major pathway to help intentions. A minor pathway was added from coping through pity \((p = .25, p = .13)\). Drug abuse is a rather unstable condition and appears to be modifiable. Whether one is ready to support a drug user mainly depends on the likelihood of perceived change based on his or her coping efforts, no matter how the problem was originally caused (see Figure 3 and Table 4).

**Figure 3** Pity and expectancy as mediators between controllability and coping and social support in the drug abuse scenario.

In case of heart disease, there was no effect of controllability, and pity also had no significant relationships (see Figure 4 and Table 4). The only pathway to support led from coping via expectancy \((p = .56, p = .26)\). Heart disease is interpreted as a modifiable condition that varies with one's health behavior such as nutrition, exercise, and relaxation. The origin of this condition seems to be unimportant for a decision to help the patient.

**Figure 4** Pity and expectancy as mediators between controllability and coping and social support in the heart disease scenario.

Anorexia nervosa can also be regarded as an unstable condition where active coping makes a difference. Controllability had no influence but coping determined expectancy \((p = .70)\) and pity \((p = .20)\) (see Figure 5 and Table 4).
Anorexia is considered a highly modifiable condition. If a patient copes well it will vanish, no matter how controllable the origin was.

![Diagram](image)

**Figure 5** Pity and expectancy as mediators between controllability and coping and social support in the anorexia scenario.

A different picture emerged for child abuse. Both direct effects on support were almost equal, with pity (ε = .37) and expectancy (ε = .31) accounting for a similar amount of variation in support. The key antecedent factor, however, was coping which was closely related to expectancy (p = .60). Compared to drug abuse, child abuse is not a health-compromising behavior but more a socially deviant act that elicits emotions such as either outrage or pity towards the actor, the latter emotion only if there was not much control over the behavior (see Figure 6 and Table 4).

![Diagram](image)

**Figure 6** Pity and expectancy as mediators between controllability and coping and social support in the child abuse scenario.

In case of depression, the predictors controllability and pity turned out to be irrelevant, whereas expectancy had an influence on support (p = .34), based on the coping efforts of the target person (p = .38). This clearly documents that an active contribution on behalf of the mental health patient is required in order to make the condition look changeable, so that support would not be in vain. Only expectancy had an effect on support (see Figure 7 and Table 4).

![Diagram](image)

**Figure 7** Pity and expectancy as mediators between controllability and coping and social support in the depression scenario.

Finally, in case of obesity, an almost identical result emerged. Again, controllability and pity were negligible factors but expectancy (p = .30), based on coping (p = .61), made the difference. Obesity is an unstable condition, and those who do not counteract their problem cannot count on help from others. Only active coping efforts elicit expectancy which in turn trigger readiness for social support (see Figure 8 and Table 4).

![Diagram](image)

**Figure 8** Pity and expectancy as mediators between controllability and coping and social support in the obesity scenario.

In sum, in five of the eight stigmas, outcome expectancy was the main predictor of support intention. These five were drug abuse, heart disease, anorexia, depression, and obesity. The two terminal diseases, AIDS and cancer, differed from the majority by their conspicuous pathway from pity to support intent. In these two cases, one's intention to help was almost exclusively based on pity. For child abuse, a balanced influence of pity and expectancy emerged. Coping was a stronger antecedent than controllability in seven out of eight cases. The exception was AIDS. The overall picture corroborates the assumption that outcome expectancy is a critical mediator between target coping and social support intention. From these results, whether one extends help or not is primarily dependent on the expectancies aroused by the victim characteristics, and particularly the person's way of coping.
Discussion

Each of the eight stigmas was examined in separate path analyses with respect to the two experimental factors, controllability and coping as antecedents, and pity and expectancy as mediators. The model fit the data and expectancies were a major direct source of support variation. Pity was a direct predictor of social support only in three specific contexts. It is noteworthy that there was a high degree of variation between the eight stigmas, indicating that the specific circumstances decide whether the willingness to help is primarily based on either pity or expectancy. In terminal diseases such as AIDS or cancer, pity appeared to be more influential than expectancy, whereas for unstable health conditions such as drug abuse, anorexia or obesity the coping-expectancy-support link was obvious. It might be, therefore, that the perceived stability of a condition is a critical underlying dimension that affects judgments of help. Controllability was less influential compared to coping which, in turn, partly determined expectancy. The most conspicuous pathway led from coping via expectancy to support intent.

STUDY II

In the first experiment, the expected improvement of the target’s condition was one of the mediators under investigation. In the second experiment, the attention was shifted to a support provider characteristic to address the question of whether the perception of one’s ability to help would make it more likely that a support intention occurs. In other words, self-efficacy expectancy, one’s perceived personal capability of extending effective support, was the focus. It was hypothesized that self-efficacy expectancy played the same role as a mediator that outcome expectancy did in the first experiment.\(^2\)

Method

Design. The path-analytic model was the same as in the first study but there were some differences in the experimental manipulations and in the measures involved. Only one problem situation was selected, a sexual assault scenario, that was varied with respect to controllability and coping. A rape victim in the uncontrollable condition was described as a student who studied one night at the library and was raped on the way to her car by a stranger. In the condition designed to seem slightly more controllable she was described as someone who attended a party where she drank too much and flirted with the males; when she was taken home by one of them, she invited him up to her apartment and was raped. The adaptively coping victim was characterized as one who was trying hard to go on with her life after the assault, having joined a support group and seeing a counselor each week. The maladaptively coping victim did not try to

overcome her problem situation. She had withdrawn from friends and did not eat; she also refused to attend a support group meeting and to see a counselor.

The experiment was arranged as a 2 x 2 between-subjects design; 70 undergraduate students responded to the vignette randomly assigned to one of four conditions. There were 55 males and only 15 females, but their distribution over the four cells was about equal, with cell sizes of 19, 17, 18 and 16.

Measures. Pity, self-efficacy expectancy and support intentions were the dependent variables used in this report. All were rated on a 5-point scale. Pity was assessed by four adjectives as part of a checklist, namely empathy, sympathy, pity, and compassion. Emotional support intent was measured by four items such as “Would you be willing to try to console and reassure your friend when she is upset?” and “Would you spend time listening to her emotional reactions to the assault?” Tangible support intent was measured by six items such as “Would you be willing to offer her help with her school work if she needed it?” and “Would you lend her money to see a therapist?” Self-efficacy expectancy was measured by a newly developed 10-item scale that was employed for the first time. Its psychometric properties were satisfactory with an average item-total correlation of .55 and an internal consistency of Cronbach’s alpha = .85. The items were worded in the following way:

1. I possess the necessary social skills to alleviate the distress of a sexual assault victim.
2. It is easy for me to comfort someone in distress.
3. I am capable of providing the appropriate resources for a rape victim.
4. It is difficult for me to communicate empathic understanding. (-)
5. I could make someone feel better no matter how depressed she is.
6. When it comes to comforting someone, I feel awkward. (-)
7. I am not sensitive enough to meet the support needs of a sufferer. (-)
8. I do not trust my skills to communicate in a beneficial way with a sexual assault victim. (-)
9. I am not the kind of person who can meet the emotional needs of others who are in a crisis. (-)
10. I have sufficient communication skills to cheer up someone who is experiencing stress.

Results

A structural model was specified with the two experimental factors as antecedents, and with pity, self-efficacy expectancy, and support as the dependent variables. In contrast to the previous study, this is a multiple indicator model. The three endogenous variables were specified with two indicators each. The four pity items were divided into two sets (each pity indicator had two items); support was specified by the emotional support scale as well as the tangible support scale, and the two self-efficacy indicators were two 5-item subsets of the instrument described above. The results of the LISREL analysis are depicted in Figure 9.

\(^2\) Study II was conducted by Grace Woo, Christine Dunkel-Schetter, and Ralf Schwarzer.
Figure 9 Pity and expectancy as mediators between controllability and coping and social support in the rape scenario.

The fit of the model was chi-square = 17.4 (15 df, $p = .295$) with a chisquare/df ratio of 1.16. Goodness of fit was GFI = .94 and adjusted goodness of fit AGFI = .87. The root mean square residual was RMSR = .09. Although the latter two indices fall short of the usual requirement, the overall fit can be regarded as satisfactory, based on the other indices. The explained variance for social support was 34%, which is quite good, whereas those for pity and for self-efficacy expectancy were low (7% each). Decomposing the effects on support led to substantial direct effects for pity ($e = .44$) and for self-efficacy expectancy ($e = .36$), and to smaller indirect effects for controllability ($e = .03$), and for coping ($e = .17$). Pity and expectancy were very good predictors of support intent, but the underlying experimental factors (control, coping) were of lesser influence.

Discussion

The second experiment has replicated the general causal model leading from victim characteristics to support provider emotional reactions or cognitions, resulting in an intention formation. Pity emerged here as the strongest predictor of support, but self-efficacy expectancy also contributed substantially. Controllability turned out to be negligible, whereas coping exerted a weak, but statistically significant, influence on pity and self-efficacy.

However, it is difficult to construe a sexual assault as controllable, and the two conditions differed in ratings of controllability only by one point, although significantly. In addition, the rape scenario is quite different from the eight stigma scenarios described in Study I. There is no disease or bodily condition involved but a single violent act caused by an external agent. An assault is likely to be viewed generally as less controllable than other social stigmas such as obesity or drug abuse. The degree of controllability only varied in the study from uncontrollable to somewhat controllable; there was not really a "controllable" experimental condition. Adverse chance events seem especially likely to trigger pity, whereupon the victim is not blamed.

GENERAL DISCUSSION

The present findings from Studies I and II are based on hypothetical scenarios with students. Therefore, the results can be generalized neither to actual helping situations nor to other populations. This procedure also has some inherent limitations in that respondents may be unable to judge accurately their affective reactions and whether they would or would not offer help to particular individuals. In addition, some key variables that affect emotion and social support certainty are excluded from the manipulated factors. However, as noted by Cooper (1976), "when looked at from the point of view of generating hypotheses, finding new leads, and initiating models of behavior, [role playing] may be the [best] method" (p. 605). In addition, in the investigations presented here and by Weiner et al. (1988), the stimulus configurations examined could not be found without overwhelming difficulty in field research, with the consequences that variables would be confounded. Finally, prior research has suggested that role-enactment strategies in the study of help-giving have yielded data comparable with observations of actual behavior (see review in Weiner, 1986). For these reasons, and particularly in light of the relatively recent growth of the study of social support, we used a hypothetical scenario method. Research must extend theoretical and experimental analyses within the current framework before applying these research questions to real-life situations.

The present studies have underscored the notion of emotional and cognitive mediators in the process of forming behavioral intentions. When dealing with victims of life events including medical patients, the likelihood of mobilizing help is dependent on a number of recipient and provider characteristics (Dunkel-Schetter & Skokan, 1990). The controllability of the cause of the problem appears to play a role in the determination of help. Moreover, the changeability or instability of the problem as reflected in coping efforts seems to elicit positive expectancies in the observer and motivation to help. Such efforts may create both a sense that the situation can be improved and a belief that one can effectively assist the victim. Thus, outcome expectancy as well as self-efficacy expectancy are useful cognitive mediators. They are part of a mechanism that governs the translation of thought into action. Both studies have dealt with one of these cognitions exclusively, and it would be worthwhile to integrate both concepts into one empirical framework in a subsequent study.

One conclusion of the first experiment concerns the specificity of the result pattern to individual situations. To what degree pity or expectancy mediate
recipient characteristics and support intent depended on the particular circumstances, i.e., the stigma chosen and, probably, the unique wording of the vignettes. In the second experiment, there was only one context provided, namely the rape scenario. Therefore, it remains unclear, as to whether these circumstances have affected the results. It could be, for example, that for a divorce or an accident, completely different path coefficients would emerge. The evidence for self-efficacy expectancy as a mediator is limited to the context chosen, and further research should make use of a number of different problem domains.

There are underlying similarities, however, between the selected problems that may suggest a common pattern of reactions to victims. For AIDS, cancer, and rape, the emotion of pity appears to be a stronger mediator than expectancy. These problems are loss/harm situations, whereas contexts such as anorexia, obesity, drug abuse, child abuse, depression and heart disease are more like threats (see Dunkel-Schetter et al., 1991; Hobfoll, 1988; Lazarus, 1990; Lazarus & Folkman, 1984). Different stress appraisals may determine the amount of pity and specific expectancies in potential support providers. If a victim is severely harmed or if the physical integrity of a victim is lost, then pity prevails; if, however, an on-going risky or threatening behavior is the topic, it is seen as more unstable and modifiable and, therefore, gives rise to a greater role for expectancies.

Expectancies can be pessimistic or optimistic. Pessimism undermines the motivation to help because the investment of further support efforts appears to be wasted; optimism, however, assumes that the victim will be responsive to future support attempts and thereby render them worthwhile. Optimism, as a psychological construct, has been defined as "generalized outcome expectancies" (Scheier & Carver, 1985, 1987). This construct has recently become one of the key issues in research on stress, coping, and mental health as well as physical health (Scheier et al., 1989; Seligman, 1991). The present studies have underscored the role of situation-specific outcome expectancies and self-efficacy expectancies after Bandura (1977, 1991). Further research should address the notion of specificity versus generality of expectancy, with dispositional optimism being one example of a more general construct. Jerusalem and Schwarz (this volume) have developed a global self-efficacy scale that has demonstrated high predictive and construct validity in several field studies. Although specific measures are preferred in clinical intervention studies of behavioral change, there might be an advantage to global measures in other research domains.

Although the present studies have provided preliminary evidence for the role of expectancies as mediators in the helping process, it remains undetermined how outcome expectancy and self-efficacy expectancy are interrelated. Each experiment has dealt with only one of these cognitions but failed to account for their joint influence. It would be premature to conclude from the above findings that outcome expectancy exerts a stronger influence on support intent than self-efficacy expectancy. There might be a causal order among the two. For example, it might be that a support provider does not scrutinize her helping capability unless being faced with a target's condition that is improving or one that is, at least, modifiable. A third variable could be critical here, namely one's personal experience with (a) crisis situations that require support, and with (b) the effectiveness of one's previous helping attempts (Dunkel-Schetter & Skokan, 1990).

Self-efficacy expectancy is shaped by context-specific mastery experiences, among others, and therefore it would be necessary to investigate expectancies jointly with an assessment of previous help experience.

REFERENCES


PSYCHOSOCIAL CORRELATES OF EMOTIONAL DISTRESS AND RISK BEHAVIOR IN AFRICAN-AMERICAN WOMEN AT RISK FOR HIV INFECTION

ADELINE NYAMATHI, HEIDI A. WAYMENT AND CHRISTINE DUNKEL-SCHETTER

University of California, Los Angeles, USA

We examined a model of stress and coping in 749 African-American women at risk for HIV infection. Women in the sample were either homeless, intravenous drug users (IVDUs) sexual partners of IVDUs, or prostitutes. A model was hypothesized based on stress and coping theory and research. Antecedents studied were personal resources, specifically self-esteem and available support. Mediators were threat appraisal and coping efforts. Outcomes studied were emotional distress and HIV risk behaviors. Structural equation modeling techniques were used to test hypothesized pathways between these variables. Forty-five percent of the variance in emotional distress in these women was explained by the model with self-esteem and avoidant coping the strongest predictors. Ten percent of the variance in risk behavior was explained by the model with emotional distress the strongest predictor. Direct and indirect pathways predicting risk behavior and distress are discussed. Implications of results for intervention and theory building are considered.

KEY WORDS: Emotional distress, risk behaviors, African-American women, HIV infection

Women and AIDS

Acquired Immunodeficiency Syndrome (AIDS) has a devastating effect on society, mainly because it is a fatal disease that affects individuals in their prime of life. The World Health Organization (WHO) has estimated that 8 to 10 million people worldwide have been infected with HIV as of 1989. Approximately 3 million are women, most of whom are from sub-Saharan African in their childbearing years (Chin, 1990). In sub-Saharan Africa, WHO estimates that by the end of 1992 over 600,000 cases of AIDS will occur in women (Chin & Mann, 1988). The majority of these women are expected to die within one year of diagnosis.

In the United States, over 20,000 women have been diagnosed with AIDS, making it one of the five leading causes of death among U.S. women between the ages of 15 and 44 years (CDC, 1992). African-American women are disproportionately affected by AIDS (Coehran, 1989; Mays, 1989). Although they represent only 12% of women in the U.S., 52% of all reported cases of AIDS are in African-American women. It is estimated that over half of African-American women (56%) are infected as a result of intravenous drug use, and another 34% as a result of unprotected sex with HIV infected individuals (CDC, 1992).

Address correspondence to: Adeline Nyamathi, University of California, Los Angeles, School of Nursing, 10833 Le Conte Avenue, Los Angeles, CA 90024-6918, USA